

B. Sc DEGREE END SEMESTER EXAMINATION - OCT. 2020 : JANUARY 2021**SEMESTER 3 : COMPLEMENTARY ZOOLOGY FOR B Sc BOTANY****COURSE : 19U3CPZ003 : HUMAN PHYSIOLOGY AND IMMUNOLOGY***(For Regular - 2019 Admission)*

Time : Three Hours

Max. Marks: 60

PART A**Answer All (1 mark each)**

1. Give examples for exogenous anticoagulants
2. Mention the two attributes of antigenicity
3. Name any two respiratory pigments.
4. What are antigen presenting cells ?
5. Write a note on Addison's disease and Cushing syndrome
6. Classify the vitamins
7. Comment on cardiac muscle.
8. Name the enzyme secreted by juxtaglomerular cells.

(1 x 8 = 8)**PART B****Answer any 6 (2 marks each)**

9. Give the significance of blood clotting
10. How does hypoxia cause cell damage?
11. Differentiate between innate and acquired immunity.
12. Phagocytosis in immune cells
13. Outline the general characteristics of hormones
14. Describe adrenal gland secretions.
15. What is fatigue?
16. Justify excretion is necessary for living beings.

(2 x 6 = 12)**PART C****Answer any 4 (4 marks each)**

17. Compare and contrast the granulocytes with diagrams
18. Describe the following: 1) Saltatory conduction 2) Neurotransmitters 3) Epilepsy
19. Give an account of oxygen transport during respiration.
20. Write a note on antigen – antibody reactions.
21. Classify the hormones based on their chemical nature?
22. Describe the Ultrastructure of Sarcomere with diagram.

(4 x 4 = 16)**PART D****Answer any 2 (12 marks each)**

23. Write an essay on the composition of blood mentioning each function?
24. What is synaptic transmission? Explain the mechanism of propagation of action potential with the help of diagrams
25. Describe and illustrate the basic structure of Immunoglobulins. Discuss the general functions of different immunoglobulins
26. Write an essay on lymphoid organs.

(12 x 2 = 24)